**Appendix 1.** Individual data for tagged fish including length, sex, release date, depth at release site, fishing depth, tag reporting status, and recovery status

**Appendix 2**. Wavelet power spectra for pop-up satellite archival-tagged sablefish (Anoplopoma fimbria). For the data on each tag, the following labels apply: A) The raw depth data downloaded from the tag. Dark grey shaded regions indicate nighttime. Note different scales for Y axis. B) bias corrected local wavelet power spectrum of the depth data. Wavelet power is color coded (red – high wavelet power; blue – low wavelet power), black lines show the 95% confidence level and gray shading represents the cone of influence. C) scale averaged wavelet spectrum for the 22 – 26 hour band of the wavelet power spectrum (solid line) and associated 95% confidence level (dashed line). D) The Morlet wavelet (ω0 = 6). E) global wavelet power spectrum (solid line) and associated 95% confidence level (dashed line). Regions shaded in red in A and C are regions where significant diurnal vertical migrations were identified (scale averaged spectrum exceeds 95 % confidence level). Note that no regions are shaded red for tag 1518 because significant diurnal vertical migratory behavior was not identified in the global wavelet spectrum.